APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/483,182	01/13/2000	Li-Wen Chen	19608-000220US	8065

30256   7590   09/10/2003

SQUIRE, SANDERS & DEMPSEY L.L.P
600 HANSEN WAY
PALO ALTO, CA   94304-1043

EXAMINER
COLBERT, ELLA

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/483,182	CHEN, LI-WEN
	Examiner	**Art Unit**
	Ella Colbert	3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2003* .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,11-15,20-24,29-33 and 38-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,11-15,20-24,28-33,40 and 41* is/are rejected.

7)☒ Claim(s) *29, 38, and 39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

1.   Claims 1-6, 11-15, 20-24, 29-33, and 38-41 are pending. Claims 7-10, 16-19,

25-28, and 34-37 have been cancelled, claims 1-6, 11-15, 20-22, 24, 29-31, and 33

have been amended, and claims 38-41 have been added in this communication filed

06/12/03 entered as Amendment A, paper no. 10.

2.   The Terminal Disclaimer filed 06/12/03 has been entered as paper no. 11. The

Non-statutory double patenting rejection still stands because though a terminal

disclaimer was filed and the claims were amended and some claims were cancelled the

claims in the co-pending applications 09/438,386 and 09/483,385 are not distinctly

different enough to have the Non-statutory double patenting rejection withdrawn. It is

suggested Applicant either amend the claims in the co-pending applications 09/438,386

and 09/483,385 to more clearly distinguish the novel features of each of the co-pending

applications or incorporate some of the computer program product claims from the co-

pending '386 application and some of the method claims from the co-pending '385

application into the apparatus claims of 09/483,182

3.   The Claim Objections to claims 4 and 14 has been overcome by Applicant's

amendment to claims 4 and 14 and is hereby with drawn.

Double Patenting

4.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11
F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA
1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*,
418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5.   Claims 1-6, 11-15, 20-24, 29-33, and 38-41 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-6, 11-15, 20-24, 29-33, and 38-42 of copending Application No. 09/483,386 and claims 1-6, 11-15, 20-24, 29-33, and 38-41copending Application No. 09/483,385. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

6.   The subject matter claimed in the instant application is fully disclosed in the referenced copending application 09/483,386 and copending application 09/483,385 and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: creating a multi dimensional report from information in a database, receiving a definition of a customer profile, receiving from a user input indicating a report configuration selection, creating a first dimension table, and creating a fact table.

This is a <u>provisional</u> obviousness-type double patenting rejection.

The co-pending Application '386 claims 1-6, 11-15, 20- 24, 29-33, and 38-42 claim a computer program product for performing the steps of creating a multi dimensional report from information in a database and the co-pending Application '385 claims 1-6, 11-15, 20-22, 24, 29-31, 33, and 38-41 claim a method for performing the

steps of creating a multi dimensional report from information in a database. The claim

limitations in the '386 and '385 co-pending applications are substantially the same as

the instant application.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1-6, 11-15, 20-23, 30-33, 40, and 41 are rejected under 35 U.S.C. 103(a)

as being unpatentable over (US 5,615,109) Eder in view of (US 5,799,286) Morgan et

al, hereafter Morgan and in view of (US 6,377,933) Brandt et al, hereafter Brandt further

in view of (US 6,212,524) Weissman et al, hereafter Weissman.

With respect to claims 1 and 11, Eder teaches, a memory (col. 31, lines 6-7), a

bus (fig. 1), processor, coupled to said memory by said bus, said processor operatively

disposed to: (col. 31, lines 3-26).

Eder did not teach, receiving a definition of at least one of a plurality of customer

profile of a plurality of customer profile groups and receiving input indicating at least one

quantity of interest in the information, receiving a definition for a data model;

dynamically creating at least one generated database based upon the data model and

configured to the quantity of interest, further comprising: creating at least one first

dimension table based upon the data schema and the quantity of interest and creating

at least one fact table based upon the data schema and the quantity of interest and the information; and displaying at least a portion of the dynamically generated database.

Morgan discloses, receiving a definition of at least one of a plurality of customer profile groups (col. 2, lines 1-16) and receiving input indicating at least one quantity of interest in the information (col. 8, lines 32-66 and col. 9, lines 1-25).

Morgan did not disclose, receiving a definition for a data model; dynamically creating at least one generated database based upon the data model and configured to the quantity of interest, further comprising: creating at least one first dimension table based upon the data schema and the quantity of interest and creating at least one fact table based upon the data schema and the quantity of interest and the information.

Brandt discloses, receiving a definition for a data model (col. 19, lines 52-67 and col. 20, lines 1-18); dynamically creating at least one generated database based upon the data model and configured to the quantity of interest, further comprising: creating at least one first dimension table based upon the data schema and the quantity of interest and creating at least one fact table based upon the data schema and the quantity of interest and the information (col. 3, lines 48-61, col. 20, lines 19-67, and col. 21, lines 1-17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to receive a definition for a data model, dynamically create at least one generated database based upon the data model and configured to the quantity of interest, further comprising: creating at least one first dimension table based upon the data schema and the quantity of interest and creating at least one fact table based upon the data schema and the quantity of interest and information and to modify in Eder and

Morgan because such a modification would allow Morgan to have two tables, a table

based upon a report and a table based upon facts. It is well known in a business

database environment to have two linking tables with information from a report.

Eder, Morgan, and Brandt did not teach, displaying at least a portion of the

dynamically generated database.

Weissman discloses, displaying at least a portion of the dynamically generated

database (col. 15, lines 8-14, col. 26, lines 25-42, and col. 37, lines 11-16). It would

have been obvious to one having ordinary skill in the art at the time the invention was

made to display at least a portion of the dynamically generated database and to modify

in Eder, Morgan, and Brandt because such a modification would allow Eder, Morgan,

and Brandt to have a datamart that is in a star schema associated with a dimension

table stored in a database that can be displayed to a user.

With respect to claims 2 and 12, Morgan teaches, generating a customer profile

report and wherein the information comprises business performance measures, and

wherein creating at least one first dimension table (col. 7, lines 40-56, col. 9, lines 1-22,

fig. 8 and fig. 18B) further comprises: creating a customer profile hierarchy and creating

at least one fact table (col. 5, lines 36-56) further comprises: aggregating said business

performance measures according to said customer profile hierarchy (see fig. 4, steps

80, 82, 84, 92, 100, and 104).

With respect to claims 3 and 13, Eder, Morgan, and Brandt did not teach,

generating an operation report, and wherein the information comprises business

performance measures, and wherein creating at least one fact table further comprises:
aggregating said business performance measures; and filtering said customer profiles.

Weissman discloses, wherein said report is an operation report, and wherein the
information comprises business performance measures, and wherein creating at least
one fact table comprises: aggregating said business performance measures; and
filtering said customer profiles (col. 15, lines 8-14) and lines 34-65 and col. 26, lines 25-
42). It would have been obvious to one having ordinary skill in the art at the time the
invention was made to have the report as an operation report, and the information
comprise business performance measures, and create at least one fact table to
comprise: aggregating said business performance measures; and to filter the customer
profiles and to modify in Eder, Morgan, and Brandt because such a modification would
allow Eder, Morgan, and Brandt to have the fact table key point to the fact table and the
aggregate group to define a set of aggregates to be built for a constellation.

With respect to claims 4 and 14, Eder, Morgan, and Brandt did not teach,
generating a customer behavior report, and wherein the information comprises
customer records, and wherein: creating at least one first dimension table further
comprises: creating at least one of a plurality of customer profiling dimensions based
upon the at least one of a plurality of customer profile groups received; and creating at
least one fact table comprises: aggregating customer records based on at least one of a
plurality of customer profiling dimensions.

Weissman discloses, generating a customer behavior report, and wherein the
information comprises customer records, and wherein: creating at least one first

dimension table (col. 14, lines 9-67, col. 15, lines 8-145 and col. 25-42) further

comprises: creating at least one of a plurality of customer profiling dimensions based

upon the at least one of a plurality of customer profile groups received; and creating at

least one fact table comprises: aggregating customer records based on at least one of a

plurality of customer profiling dimensions (col. 7, lines 64-67, col. 8, lines 1-25, and col.

10, lines 24-42). It would have been obvious to one having ordinary skill in the art at the

time the invention was made to modify in Eder, Morgan, and Brandt because such a

combination would allow the fact table to show the profile of the customer and the

customer's interest.

With respect to claim 5, Eder, Morgan, and Brandt did not teach, creating a list of

customers for each one of the plurality of customer profile groups and creating at least

one intermediary data structure to manage the list of customers.

Weissman discloses, creating a list of customers for each one of the plurality of

customer profile groups (col. 12, lines 63-67, col. 13, lines 1-11, col. 35, lines 5-12, col.

35, lines 30-54, and figs. 8-10); and creating at least one intermediary data structure to

manage the list of customers (col. 34, lines 33-63).

Eder discloses, creating customer classification components in a meta model for

each customer profile group (col. 13, lines 1-20 –shows a meta model for each

customer profile group). It would have been obvious to one having ordinary skill in the

art at the time the invention was made to create a list of customers for each customer

profile in said plurality of customer profile groups and create customer classification

components in a meta model for each customer profile group and to modify in Morgan

and Brandt because such a modification would allow Morgan and Brandt to create

detailed forecasts of sales before generating profit maximizing sets of requisitions.

With respect to claims 6, 15, 24, and 33, Eder, Morgan, and Weissman did not

teach, wherein said information comprises at least one of telecommunications

information, financial information, retail market information, insurance information, and

health care information.

Brandt discloses, wherein said information comprises at least one of

telecommunications information, financial information, retail market information,

insurance information, and health care information (col. 5, lines 56-61, col. 18, lines 6-

35, and col. 6, lines 7-9). It would have been obvious to one having ordinary skill in the

art at the time the invention was made to have at least one of telecommunications

information, financial information, retail market information, insurance information, and

health care information and to modify in Eder, Morgan, and Weissman because it would

enable Eder, Morgan, and Weissman to have a network with telecommunications

information defining the physical network to satisfy the data volume requirements and to

have metadata in a datamart that includes financial information, retail marketing

information, insurance information, and health care information for a business

organization.

With respect to claim 20, Eder teaches, a memory (col. 31, lines 6-7), a bus (fig.

1), processor, coupled to said memory by said bus, said processor operatively disposed

to: (col. 31, lines 3-26).

Eder and Brandt did not teach, defining a virtual data model; determining from

the virtual data model a second data schema; receiving as input a third data model

definition; creating a third database having a third data schema from the third data

model; creating a first mapping that provides a translation for data from said first data

schema to said second data schema; creating a second mapping, that provides a

translation for data from the second data schema to the third data schema; and

selectively migrating information from at least one of the first database to the second

database according to the first mapping and the second database to the third database

according to the second mapping.

Weissman discloses, defining a virtual data model (col. 7, lines 34-63);

determining from the virtual data model a second data schema (col. 10, lines 24-42);

receiving as input a third data model definition; creating a third database having a third

data schema from the third data model (col. 10, lines 63-67).

Morgan discloses, creating a first mapping that provides a translation for data

from said first data schema to said second data schema (col. 5, lines 64-67 and col. 6,

lines 1-13); creating a second mapping, that provides a translation for data from the

second data schema to the third data schema; and selectively migrating information

from at least one of the first database to the second database according to the first

mapping and the second database to the third database according to the second

mapping (col. 6, lines 37-63). It would have been obvious to one having ordinary skill in

the art at the time the invention was made to create a first mapping that provides a

translation for data from the first data schema to the second data schema, create a

second mapping that provides a translation for the data from the second data schema to

the third data schema and selectively migrate information from at least one of the first

database to the second database according to the first mapping and the second

database to the third database according to the second mapping and to modify in Eder,

Brandt, and Weissman because such a modification would allow Eder, Brandt, and

Weissman to have mapped data that basically identifies the management organizations

at a site in the second data schema and the first data schema to contain personnel

information or people mapping and the third data schema to contain cost.

This independent claim is also rejected for the similar rationale given above for

claims 1 and 11

With respect to claim 21, Morgan teaches, wherein said first data schema

comprises a star schema (col. 7, lines 64-67 and col. 8, lines 1-7 and lines 32-51).

With respect to claims 22 and 31, Morgan teaches, wherein the virtual data

model comprises an identity centric data organization (col. 8, lines 32-66).

With respect to claims 23 and 32, Morgan teaches, wherein said identity is a

customer identity (col. 6, lines 48-52).

With respect to claim 30, this independent claim is rejected for the similar

rationale given above for independent claims 1, 11, and 20.

With respect to claim 40, Eder teaches, receiving a selection of a targeted

customer segment of interest as the quantity of interest (col. 2, lines 45-63); generating

at least one of a plurality of targeted customer segment tables based upon the

dynamically generated database; and providing the targeted customer segment tables to external applications (col. 8, lines 24-67 and col. 9, lines 1-38).

With respect to claim 41, Eder, Morgan, and Brandt did not teach, receiving input from an on-line application processor (OLAP); transforming the input into a database query based upon the data model; and providing information in response to the database query.

Weissman discloses, receiving input from an on-line application processor (OLAP) (col. 7, lines 1-9 and lines 34-42); transforming the input into a database query based upon the data model; and providing information in response to the database query (col. 11, lines 65-67 and col. 12, lines 1-21). It would have been obvious to one having ordinary skill in the art at the time the invention was made to receive input from an on-line application processor (OLAP); transform the input into a database query based upon the data model; and provide information in response to the database query and to modify in Eder, Morgan, and Brandt because such a modification would allow Eder, Morgan, and Brandt to have a query mechanism schema for the system that defines the query/reporting information and the measurement information.

Allowable Subject Matter

8.   Claims 29, 38, and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant's claim 29 claiming the virtual data model comprises a reverse star schema, claim 38 claiming generating a data warehouse populated with the information from the source database according

with the reverse star schema meta-model, claim 39 claiming the meta-model is a

reverse star schema, was not disclosed or suggested by the prior art of record.

Response to Arguments

8.   Applicant's arguments with respect to claims 1-6, 11-15, 20-24, and 29-33 have

been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Raccaforte (US 6,484,179) disclosed multidimensional data in a relational

database management system, a fact table, a mapping function and a multidimensional

cube.

Castelli et al (US 5,978,788) disclosed an online analytical processing engine,

mapping, a dimension table, a fact table, and data warehouse.

Colby et al (US 6,594,653) disclosed fact tables, aggregate views and tables,

hierarchies, and dimension tables.

Inquiries

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ella Colbert whose telephone number is 703-308-7064.

The examiner can normally be reached on Monday-Thursday from 6:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Vincent Millin can be reached on 703-308-1038. The fax phone number for

the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

E. Colbert
September 8, 2003